DOCKET NO. RFMI01-00227 **PATENT**
Customer No. 23990

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:	Robert J. Kansy
Serial No.:	10/824,843
Filed:	April 15, 2004
For:	SYSTEM, METHOD, AND CIRCUIT FOR DYNAMIC RANGE ENHANCEMENT IN A COMMUNICATION SYSTEM
Group No.:	2618
Examiner:	Nhan T. Le

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Effective on 12/08/2004.
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FEE TRANSMITTAL
For FY 2006

☑ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT ($) 250.00

Complete if Known	
Application Number	10/824,843
Filing Date	April 15, 2004
First Named Inventor	Robert J. Kansy
Examiner Name	Nhan T. Le
Art Unit	2618
Attorney Docket No.	RFMI01-00227

METHOD OF PAYMENT (check all that apply)

☑ Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify): _____

☑ Deposit Account Deposit Account Number: 50-0208 Deposit Account Name: Munck Butrus P.C.

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

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FEE CALCULATION

1. BASIC FILING, SEARCH, AND EXAMINATION FEES

	FILING FEES		SEARCH FEES		EXAMINATION FEES		
		Small Entity		Small Entity		Small Entity	
Application Type	Fee ($)	Fee ($)	Fee ($)	Fee ($)	Fee ($)	Fee ($)	Fees Paid ($)
Utility	300	150	500	250	200	100	
Design	200	100	100	50	130	65	
Plant	200	100	300	150	160	80	
Reissue	300	150	500	250	600	300	
Provisional	200	100	0	0	0	0	

2. EXCESS CLAIM FEES

Fee Description	Fee ($)	Small Entity Fee ($)
Each claim over 20 or, for Reissues, each claim over 20 and more than in the original patent	50	25
Each independent claim over 3 or, for Reissues, each independent claim more than in the original patent	200	100
Multiple dependent claims	360	180

Total Claims	Extra Claims	Fee ($)	Fee Paid ($)	Multiple Dependent Claims Fee ($)	Multiple Dependent Claims Fee Paid ($)
_____ - 20 or HP =	_____ x	_____ =	_____	_____	_____
HP = highest number of total claims paid for, if greater than 20					
Indep. Claims	**Extra Claims**	**Fee ($)**	**Fee Paid ($)**		
_____ - 3 or HP =	_____ x	_____ =	_____		
HP = highest number of independent claims paid for, if greater than 3					

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper, the application size fee due is $250 ($125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof	Fee ($)	Fee Paid ($)
_____ - 100 =	_____ / 50 =	_____ (round **up** to a whole number)	x _____ =	_____

4. OTHER FEE(S) **Fees Paid ($)**

Non-English Specification, $130 fee (no small entity discount) _____

Other: Appeal Brief filing fee $250.00

SUBMITTED BY

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AP/IFW

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APPEAL BRIEF

The Appellant has appealed to the Board of Patent Appeals and Interferences from the decision of the Examiner dated January 11, 2006, finally rejecting Claims 1-26. The Appellant filed a Notice of Appeal on April 10, 2006, which was received by the U.S. Patent and Trademark Office on April 14, 2006. The Appellant respectfully submits this brief on appeal with the appropriate statutory fee.

REAL PARTY IN INTEREST

This application is currently owned by RF Monolithics, Inc. as indicated by an assignment recorded on April 15, 2004 in the Assignment Records of the U.S. Patent and Trademark Office at Reel 015224, Frame 0450.

RELATED APPEALS AND INTERFERENCES

There are no known appeals or interferences that will directly affect, be directly affected by, or have a bearing on the Board's decision in this pending appeal.

STATUS OF CLAIMS

Claims 1-26 have been rejected pursuant to a final Office Action dated January 11, 2006. Claims 1-26 are presented on appeal. A copy of the claims is provided in Appendix A.

STATUS OF AMENDMENTS

No amendments were submitted and refused entry after issuance of the final Office Action dated January 11, 2006.

SUMMARY OF CLAIMED SUBJECT MATTER

Regarding Claim 1, a circuit 204 includes one or more first amplifiers 306 operable to amplify an incoming signal to produce an amplified incoming signal. (*Application, Pages 12-13, Par. [0036]*). The incoming signal is associated with a desired signal. (*Application, Page 7, Par.*

[0022]). The circuit 204 also includes a controller 324 operable, in response to the amplified incoming signal exceeding a first threshold and the desired signal not exceeding a second threshold, to (i) allow one or more second amplifiers 308 to amplify the incoming signal, and/or (ii) increase a current supplied to the one or more first amplifiers 306. (*Application, Pages 14-15, Par. [0042]*).

Regarding Claim 7, a system 106 includes an antenna 202 operable to receive an incoming signal. (*Application, Page 9, Par. [0027]*). The system 106 also includes a receiver 204 having one or more first amplifiers 306 operable to amplify the incoming signal to produce an amplified incoming signal. (*Application, Page 9, Par. [0028]; Pages 12-13, Par. [0036]*). The incoming signal is associated with a desired signal. (*Application, Page 7, Par. [0022]*). The receiver 204 also includes a controller 324 operable, in response to the amplified incoming signal exceeding a first threshold and the desired signal not exceeding a second threshold, to (i) allow one or more second amplifiers 308 to amplify the incoming signal, and/or (ii) increase a current supplied to the one or more first amplifiers 306. (*Application, Pages 14-15, Par. [0042]*).

Regarding Claim 15, a method includes amplifying an incoming signal using one or more first amplifiers 306 to produce an amplified incoming signal. (*Application, Pages 19-20, Par. [0055]*). The incoming signal is associated with a desired signal. (*Application, Page 7, Par. [0022]*). The method also includes determining whether the amplified incoming signal exceeds a first threshold and the desired signal does not exceed a second threshold. (*Application, Page 21, Par. [0061]*). In addition, the method includes, in response to determining that the first threshold is exceeded and the second threshold is not exceeded, (i) allowing one or more second amplifiers 308 to amplify the incoming signal, and/or (ii) increasing a current supplied to the one or more first

amplifiers 306. (*Application, Page 21, Par. [0062]*).

GROUNDS OF REJECTION

1. Claims 1-5, 7-9, 11-17, and 21-26 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,324,387 to Kamgar et al. ("*Kamgar*") in view of U.S. Patent No. 6,822,696 to Talmola et al. ("*Talmola*").

2. Claims 6, 10, and 18-20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over *Kamgar* and *Talmola* in view of U.S. Patent No. 5,734,974 to Callaway, Jr. et al. ("*Callaway*").

ARGUMENT

I. GROUND OF REJECTION #1

The rejection of Claims 1-5, 7-9, 11-17, and 21-26 under 35 U.S.C. § 103(a) is improper and should be withdrawn.

A. OVERVIEW

Claims 1-5, 7-9, 11-17, and 21-26 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,324,387 to Kamgar et al. ("*Kamgar*") in view of U.S. Patent No. 6,822,696 to Talmola et al. ("*Talmola*").

B. STANDARD

In *ex parte* examination of patent applications, the Patent Office bears the burden of establishing a *prima facie* case of obviousness. (*MPEP § 2142; In re Fritch, 972 F.2d 1260, 1262, 23 U.S.P.Q.2d 1780, 1783 (Fed. Cir. 1992)*). The initial burden of establishing a *prima facie* basis to deny patentability to a claimed invention is always upon the Patent Office. (*MPEP § 2142; In re Oetiker, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); In re Piasecki, 745 F.2d 1468, 1472, 223 U.S.P.Q. 785, 788 (Fed. Cir. 1984)*). Only when a *prima facie* case of obviousness is established does the burden shift to the Appellant to produce evidence of nonobviousness. (*MPEP § 2142; In re Oetiker, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); In re Rijckaert, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993)*). If the Patent Office does not produce a *prima facie* case of unpatentability, then without more the Appellant is entitled to grant of a patent. (*In re Oetiker, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); In re Grabiak, 769 F.2d 729, 733, 226 U.S.P.Q. 870, 873 (Fed. Cir. 1985)*).

A *prima facie* case of obviousness is established when the teachings of the prior art itself suggest the claimed subject matter to a person of ordinary skill in the art. (*In re Bell, 991 F.2d 781, 783, 26 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1993)*). To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed invention and the

reasonable expectation of success must both be found in the prior art, and not based on the Appellant's disclosure. (*MPEP § 2142*).

C. THE *KAMGAR* REFERENCE

Kamgar recites a receiver having a low noise amplifier (LNA) 105 and a controller 110 that adjusts the gain of the amplifier 105. (*Abstract; Figure 1*). A comparator 150 compares an "RSSI" signal to a voltage reference "T_r" and outputs a signal 160, and a comparator 155 compares a "Pilot Power" signal to a voltage reference "T_p" and outputs a signal 165. (*Col. 4, Lines 44-61*). The signals 160 and 165 are used by the controller 110 to determine how the gain of the amplifier 105 is adjusted. (*Col. 5, Lines 6-56*). For example, if "T_r" is exceeded and "T_p" is not (condition 2 in Table 1), the gain of the amplifier 105 is decreased. (*Col. 5, Lines 38-44*). If "T_p" is exceeded and "T_r" is not (condition 3 in Table 1), the gain of the amplifier 105 remains unchanged. (*Col. 5, Lines 45-50*).

D. THE *TALMOLA* REFERENCE

Talmola recites a television receiver capable of receiving both analog and digital signals. (*Abstract*). The receiver includes an RF amplifier 304 and a controller 318. (*Figure 3*). The controller 318 adjusts a bias current provided to the RF amplifier 304 based on the bit error rate (BER) of the decoded digital signals. (*Col. 3, Lines 4-7*). For example, the controller 318 may decrease the bias current when the BER is better than a higher acceptable level (denoted "X") and increase the bias current when the BER is worse than a lower acceptable level (denoted "Y"). (*Figure 5; Col. 3, Lines 8-33*).

E. CLAIMS 1-5, 7-9, 11-17, 22, 24, AND 26

Claim 1 recites a circuit, which includes:

> one or more first amplifiers operable to amplify an incoming signal to produce an amplified incoming signal, the incoming signal associated with a desired signal; and
>
> a controller operable, in response to the amplified incoming signal exceeding a first threshold and the desired signal not exceeding a second threshold, to at least one of:
>
> allow one or more second amplifiers to amplify the incoming signal; and
>
> increase a current supplied to the one or more first amplifiers.

The Examiner has failed to show that the proposed *Kamgar–Talmola* combination teaches or suggests all elements of Claim 1. In particular, the Examiner has failed to show that the proposed *Kamgar–Talmola* combination teaches or suggests a controller that is operable to "allow one or more second amplifiers to amplify [an] incoming signal" and/or "increase a current supplied to ... one or more first amplifiers" in response to an "amplified incoming signal exceeding a first threshold" and a "desired signal not exceeding a second threshold" as recited in Claim 1.

Kamgar recites the use of two voltage references (denoted "T_r" and "T_p"). There are only two situations in *Kamgar* that involve one voltage reference being exceeded while the other voltage reference is not exceeded. These two situations are labeled "condition 2" and "condition 3" in Table 1 of *Kamgar*. In "condition 3," *Kamgar* explicitly notes that "no change" occurs, meaning the gain of the low noise amplifier 105 in *Kamgar* remains unchanged.

Because of this, only the actions that occur during "condition 2" of *Kamgar* could possibly be relied upon as teaching or suggesting these elements of Claim 1. Only in "condition 2" does *Kamgar*

take action to adjust the gain of the low noise amplifier 105. More specifically, in "condition 2," *Kamgar* explicitly notes that the gain of the low noise amplifier 105 is decreased.

Kamgar clearly recites what occurs if a first voltage reference is exceeded and a second voltage reference is not – the gain of the low noise amplifier 105 either decreases (condition 2) or remains unchanged (condition 3). The Examiner has not shown that the actions taken during "condition 2" of *Kamgar* include allowing "one or more second amplifiers to amplify the incoming signal" and/or increasing a "current supplied to the one or more first amplifiers" as recited in Claim 1.

Talmola recites that the bias current of an RF amplifier 304 is increased if a bit error rate (BER) is worse than two acceptable levels (denoted "X" and "Y"). This means that the same signal (the bit error rate) is compared to two different thresholds in *Talmola*. This fails to teach or suggest Claim 1, which recites that one or more actions occur in response to an "amplified incoming signal" exceeding a first threshold and a "desired signal" not exceeding a second threshold.

Moreover, in *Talmola*, the increase in the bias current only occurs if the bit error rate falls below both acceptable levels. The bias current is not adjusted if the bit error rate falls between the acceptable levels. In other words, *Talmola* does not adjust the bias current if one acceptable level is exceeded while the other acceptable level is not exceeded.

The Examiner states in the Advisory Action dated April 5, 2006 that *Talmola* "teaches a receiver wherein the controller reduces or increases the bias current applied to the amplifier ... based on the [comparison] of BER with two acceptable levels (ie. threshold)." (*04/05/06 Office Action, Page 2*). However, the Examiner ignores specific claim elements when making this argument.

Claim 1 does not merely recite comparing a signal to two thresholds and then taking some action. Claim 1 explicitly recites that one or more actions occur in response to one signal "exceeding a first threshold" and a second signal "not exceeding a second threshold."

Talmola never recites that the bias current supplied to the amplifier 304 is increased if a first threshold is exceeded and a second threshold is not exceeded. *Talmola* also compares the same BER value to two acceptable levels. *Talmola* never teaches or suggests that one signal is compared to a first threshold and a second signal is compared to a second threshold. As a result, *Talmola* fails to teach or suggest the cited elements of Claim 1.

In addition, *Kamgar* and *Talmola* recite two completely different techniques for adjusting the operation of a receiver. *Kamgar* operates by comparing RSSI and pilot power signals to different thresholds and then adjusting the gain of an amplifier. *Talmola* operates by comparing a single BER value to different thresholds and adjusting the bias current of an amplifier. The Examiner has never explained how these two completely different techniques could be integrated into a single device to render Claim 1 obvious. At most, the receiver of *Kamgar* could be modified to implement the following:

(1) decrease the gain of the amplifier 105 when the RSSI signal exceeds T_r and the pilot power signal does not exceed T_p (condition 2) as taught by *Kamgar*; and

(2) increase the bias current of the amplifier 105 when the bit error rate falls below two different thresholds (not T_r and T_p) as taught by *Talmola*.

This combination fails to teach or suggest allowing "one or more second amplifiers to amplify the incoming signal" and/or increasing a "current supplied to the one or more first

amplifiers" in response to "the amplified incoming signal exceeding a first threshold and the desired signal not exceeding a second threshold" as recited in Claim 1. Nothing in *Kamgar* or *Talmola* teaches or suggests using additional amplifiers to amplify an incoming signal in response to "the amplified incoming signal exceeding a first threshold and the desired signal not exceeding a second threshold." Similarly, the only time *Kamgar* or *Talmola* teaches or suggests "increasing" the current supplied to an amplifier occurs when the bit error rate in *Talmola* falls below two acceptable levels. Nothing in *Kamgar* or *Talmola* teaches or suggests increasing a current supplied to one or more amplifiers in response to "the amplified incoming signal exceeding a first threshold and the desired signal not exceeding a second threshold" as recited in Claim 1.

In effect, the Examiner has simply established that *Kamgar* takes some action when one threshold is exceeded and another threshold is not exceeded. The Examiner has also established that *Talmola* takes a different action (increasing a bias current) when two different thresholds (BER acceptable levels) are not exceeded. The Examiner then makes the completely unsupported allegation that it would be obvious to perform the action of *Talmola* (increasing a bias current) when one threshold in *Kamgar* is exceeded and another threshold in *Kamgar* is not exceeded. This is improper.

Talmola is crystal clear – a bias current is increased only when a bit error rate fails to exceed two BER thresholds. The Examiner provides no explanation why the bias current of *Talmola* would be increased when one completely unrelated threshold (the RSSI threshold) is exceeded and another completely unrelated threshold (the pilot power threshold) is not exceeded as taught by *Kamgar*. Without any explanation as to why this would be obvious, the Examiner cannot establish that a

person skilled in the art would be motivated to modify *Kamgar* with *Talmola* to reach the claimed invention.

For these reasons, the Examiner fails to establish that the proposed *Kamgar–Talmola* combination teaches or suggests all elements of Claim 1 (and its dependent claims). For similar reasons, the Examiner fails to establish that the proposed *Kamgar–Talmola* combination teaches or suggests all elements of Claims 7 and 15 (and their dependent claims).

Accordingly, the Appellant respectfully requests that the § 103 rejection of Claims 1-5, 7-9, 11-17, 22, 24, and 26 be withdrawn and that Claims 1-5, 7-9, 11-17, 22, 24, and 26 be passed to allowance.

F. CLAIMS 21, 23, AND 25

Claim 21 recites the circuit of Claim 1, where:

> the controller is operable, in response to the amplified incoming signal exceeding the first threshold and the desired signal not exceeding the second threshold, to allow the one or more second amplifiers to amplify the incoming signal.

Claim 21 is patentable due to its dependence from an allowable base claim. In addition, the Examiner fails to establish that the proposed *Kamgar–Talmola* combination teaches or suggests these elements of Claim 21.

Kamgar simply recites varying the gain of a low noise amplifier 105 using a controller 110. *Kamgar* lacks any mention of allowing one or more additional low noise amplifiers 105 to amplify an incoming signal when one threshold is exceeded and another threshold is not exceeded.

Talmola simply recites varying the bias current of an RF amplifier 304 using a controller 318. *Talmola* lacks any mention of allowing one or more additional RF amplifiers 304 to amplify an incoming signal when one threshold is exceeded and another threshold is not exceeded.

The Examiner cites column 3, lines 8-38 of *Talmola* as allegedly disclosing the use of one or more "second amplifiers" to amplify an incoming signal. (*01/11/06 Office Action, Page 4, Third paragraph*). However, this portion of *Talmola* only describes how the controller 318 can adjust the bias current of an RF amplifier 304. This portion of *Talmola* says absolutely nothing about using one or more "second amplifiers" to amplify an incoming signal.

For these reasons, the Examiner fails to establish that the proposed *Kamgar–Talmola* combination teaches or suggests all elements of Claim 21. For similar reasons, the Examiner fails to establish that the proposed *Kamgar–Talmola* combination teaches or suggests all elements of Claims 23 and 25.

Accordingly, the Appellant respectfully requests that the § 103 rejection of Claims 21, 23, and 25 be withdrawn and that Claims 21, 23, and 25 be passed to allowance.

II. GROUND OF REJECTION #2

The rejection of Claims 6, 10, and 18-20 under 35 U.S.C. § 103(a) is improper and should be withdrawn.

A. OVERVIEW

Claims 6, 10, and 18-20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over

Kamgar and *Talmola* in view of U.S. Patent No. 5,734,974 to Callaway, Jr. et al. ("*Callaway*").

B. THE *CALLAWAY* REFERENCE

Callaway recites a receiver having a switchable gain circuit (or RF amplifier) 104 and a stepwise variable gain control circuit 118. (*Abstract; Col. 2, Lines 2-13*). The stepwise variable gain control circuit 118 can adjust the gain provided by the switchable gain circuit 104. (*Col. 2, Lines 34-45*). The stepwise variable gain control circuit 118 can also control the attenuation of a PIN diode attenuator 120 using a voltage source output of the stepwise variable gain control circuit 118. (*Col. 2, Lines 45-54*).

C. CLAIMS 6, 10, AND 18-20

Claim 6 recites the circuit of Claim 1, which further includes:

> a switch capable of coupling a power supply to at least one of the one or more first amplifier and the one or more second amplifiers, the controller operable to open and close the switch.

Claim 6 is patentable due to its dependence from an allowable base claim. In addition, the Examiner fails to establish that the proposed *Kamgar–Talmola–Callaway* combination teaches or suggests these elements of Claim 6.

As an initial matter, the Examiner appears to have incorrectly cited *Talmola* in rejecting Claim 6. The Examiner states that *Talmola* teaches a "switch coupling a power supply to at least one ... amplifier" and a controller "operable to open and close the switch" at column 2, lines 2-54. (*01/11/06 Office Action, Page 5, First paragraph*). However, *Talmola* does not disclose the use of a

switch at column 2, lines 2-54.

The Appellant believes the Examiner intended to cite column 2, lines 2-54 of *Callaway*. However, this portion of *Callaway* also fails to disclose the use of a "switch" as recited in Claim 6. Rather, the cited portion of *Callaway* simply recites how the stepwise variable gain control circuit 118 can adjust the gain provided by the switchable gain circuit 104. This portion of *Callaway* also recites how the stepwise variable gain control circuit 118 can control the attenuation of the PIN diode attenuator 120 using a voltage source output.

Other than using the words "switchable" and "source," this portion of *Callaway* appears completely unrelated to Claim 6. This portion of *Callaway* lacks any mention of a "switch" capable of coupling a "power supply" to one or more amplifiers. This portion of *Callaway* also lacks any mention of a "controller operable to open and close the switch."

For these reasons, the Examiner fails to establish that the proposed *Kamgar–Talmola–Callaway* combination teaches or suggests all elements of Claim 6. For similar reasons, the Examiner fails to establish that the proposed *Kamgar–Talmola* combination teaches or suggests all elements of Claims 10 and 18 (and their dependent claims).

Accordingly, the Appellant respectfully requests that the § 103 rejection of Claims 6, 10, and 18-20 be withdrawn and that Claims 6, 10, and 18-20 be passed to allowance.

SUMMARY

The Appellant has demonstrated that the present invention as claimed is clearly distinguishable over the prior art cited of record. Therefore, the Appellant respectfully requests that the Board of Patent Appeals and Interferences reverse the final rejection of the Examiner and instruct the Examiner to issue a notice of allowance of all claims.

The Appellant has enclosed the appropriate fee to cover the cost of this APPEAL BRIEF. The Appellant does not believe that any additional fees are due. However, the Commissioner is hereby authorized to charge any additional fees (including any extension of time fees) or credit any overpayments to Deposit Account No. 50-0208.

Respectfully submitted,

MUNCK BUTRUS, P.C.

Date: June 13, 2006

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APPENDIX A

PENDING CLAIMS APPENDIX

1. A circuit, comprising:

one or more first amplifiers operable to amplify an incoming signal to produce an amplified incoming signal, the incoming signal associated with a desired signal; and

a controller operable, in response to the amplified incoming signal exceeding a first threshold and the desired signal not exceeding a second threshold, to at least one of:

allow one or more second amplifiers to amplify the incoming signal; and

increase a current supplied to the one or more first amplifiers.

2. The circuit of Claim 1, further comprising:

a first comparator operable to compare the amplified incoming signal to the first threshold; and

a second comparator operable to compare the desired signal to the second threshold.

3. The circuit of Claim 1, further comprising a filter operable to filter the incoming signal to produce a filtered incoming signal; and

wherein the one or more first amplifiers are operable to amplify the filtered incoming signal to produce the amplified incoming signal.

4. The circuit of Claim 1, further comprising:

a mixer operable to perform a mixing operation involving the amplified incoming signal to produce a mixed incoming signal;

a filter operable to filter the mixed incoming signal to produce a filtered mixed incoming signal; and

a third amplifier operable to amplify the filtered mixed incoming signal to produce the desired signal.

5. The circuit of Claim 4, wherein the filter comprises a bandpass filter.

6. The circuit of Claim 1, further comprising a switch capable of coupling a power supply to at least one of the one or more first amplifier and the one or more second amplifiers, the controller operable to open and close the switch.

7. A system, comprising:
an antenna operable to receive an incoming signal; and
a receiver comprising:
one or more first amplifiers operable to amplify the incoming signal to produce an amplified incoming signal, the incoming signal associated with a desired signal; and
a controller operable, in response to the amplified incoming signal exceeding a first threshold and the desired signal not exceeding a second threshold, to at least one of:
allow one or more second amplifiers to amplify the incoming signal; and
increase a current supplied to the one or more first amplifiers.

8. The system of Claim 7, further comprising:
a first comparator operable to compare the amplified incoming signal to the first threshold; and
a second comparator operable to compare the desired signal to the second threshold.

9. The system of Claim 7, further comprising:
a first filter operable to filter the incoming signal to produce a filtered incoming signal, wherein the one or more first amplifiers are operable to amplify the filtered incoming signal to produce the amplified incoming signal;
a mixer operable to perform a mixing operation involving the amplified incoming signal to produce a mixed incoming signal;
a second filter operable to filter the mixed incoming signal to produce a filtered mixed incoming signal; and
a third amplifier operable to amplify the filtered mixed incoming signal to produce the desired signal.

10. The system of Claim 7, further comprising a switch capable of coupling a power supply to at least one of the one or more first amplifier and the one or more second amplifiers, the controller operable to open and close the switch.

11. The system of Claim 7, further comprising receive processing circuitry operable to process the desired signal.

12. The system of Claim 7, wherein the receiver comprises a portion of a transceiver.

13. The system of Claim 12, further comprising transmit processing circuitry operable to generate an outgoing signal for transmission by the transceiver.

14. The system of Claim 7, wherein the antenna and receiver comprise at least a portion of one of: a mobile telephone, a computing device, and a personal digital assistant.

15. A method, comprising:

amplifying an incoming signal using one or more first amplifiers to produce an amplified incoming signal, the incoming signal associated with a desired signal;

determining whether the amplified incoming signal exceeds a first threshold and the desired signal does not exceed a second threshold; and

in response to determining that the first threshold is exceeded and the second threshold is not exceeded, at least one of:

allowing one or more second amplifiers to amplify the incoming signal; and

increasing a current supplied to the one or more first amplifiers.

16. The method of Claim 15, further comprising filtering the incoming signal to produce a filtered incoming signal; and

wherein amplifying the incoming signal comprises amplifying the filtered incoming signal to produce the amplified incoming signal.

17. The method of Claim 15, further comprising:

mixing the amplified incoming signal and a local oscillator signal to produce a mixed incoming signal;

filtering the mixed incoming signal to produce a filtered mixed incoming signal; and

amplifying the filtered mixed incoming signal to produce the desired signal.

18. The method of Claim 15, wherein at least one of allowing the one or more second amplifiers to amplify the incoming signal and increasing the current supplied to the one or more first amplifiers comprises closing a switch, the switch capable of coupling a power supply to at least one of the one or more first amplifiers and the one or more second amplifiers.

19. The method of Claim 18, further comprising:

determining whether at least one of: the amplified incoming signal no longer exceeds the first threshold and the desired signal exceeds the second threshold; and

in response to determining that the amplified incoming signal no longer exceeds the first threshold or the desired signal exceeds the second threshold, at least one of:

no longer allowing the one or more second amplifiers to amplify the incoming signal; and

decreasing the current supplied to the one or more first amplifiers.

20. The method of Claim 19, wherein no longer allowing the one or more second amplifiers to amplify the incoming signal and decreasing the current supplied to the one or more first amplifiers comprises opening the switch.

21. The circuit of Claim 1, wherein the controller is operable, in response to the amplified incoming signal exceeding the first threshold and the desired signal not exceeding the second threshold, to allow the one or more second amplifiers to amplify the incoming signal.

22. The circuit of Claim 1, wherein the controller is operable, in response to the amplified incoming signal exceeding the first threshold and the desired signal not exceeding the second threshold, to increase the current supplied to the one or more first amplifiers.

23. The system of Claim 7, wherein the controller is operable, in response to the amplified incoming signal exceeding the first threshold and the desired signal not exceeding the second threshold, to allow the one or more second amplifiers to amplify the incoming signal.

24. The system of Claim 7, wherein the controller is operable, in response to the amplified incoming signal exceeding the first threshold and the desired signal not exceeding the second threshold, to increase the current supplied to the one or more first amplifiers.

25. The method of Claim 15, wherein the method comprises, in response to determining that the first threshold is exceeded and the second threshold is not exceeded, allowing the one or more second amplifiers to amplify the incoming signal.

26. The method of Claim 15, wherein the method comprises, in response to determining that the first threshold is exceeded and the second threshold is not exceeded, increasing the current supplied to the one or more first amplifiers.

APPENDIX B

EVIDENCE APPENDIX

None

APPENDIX C

RELATED PROCEEDINGS APPENDIX

None